Astr 400/500 (the Astronomical Unit): Fall 2017

Astr 400/500 is a seminar course on current research topics in astronomy, astrophysics, and space physics, intended for juniors and seniors (400) and graduate students (500). Each week there will be 1 or 2 speakers which may include faculty, visiting scholars, or students. Students will be expected to give one oral presentation each semester.

Course Objectives and Learning Outcomes: This course is primarily intended to expose the students to a range of astronomy related research being conducted in the department and more generally within the scientific community. The course is also intended to give students the opportunity to begin to develop their skills at giving oral scientific presentations. This second goal is particularly important for graduate students taking Astr 500.

Schedule

Aug. 23: Orientation

Aug. 30: Hurricane Harvey

Sept. 6: Edison Liang (Rice Univ.), "Relativistic Shear Flows and Astrophysical Applications"

Sept. 13: Paola Pinilla (Univ. of Arizona), "Rings, gaps and cavities in protoplanetary disks: What if there is no planets?"

Sep. 20: Andrea Isella (Rice)

Sep. 27: Laura Flagg (Rice): "Searching for new young stars in the northern hemisphere: The Pisces Moving Group"

Oct. 4: Jason Ling (Rice) / Erik Weaver (Rice)

Oct. 11: Kun Hu (Rice)

Oct. 18: Yingchao Lu (Rice): "Magnetized jet creation using a hollow ring of laser beams"

Oct. 25: Yannick Holtkamp (Rice): "The jet of the young star RW Aur A and related problems" / Mustafa Amin (Rice): "LIGO Detection of Colliding Neutron Stars and What it all Means"

Nov. 1: Lorenzo Venneri (Rice): "An Approach to Single Frame Time Series Observations" / Asa Stahl (Rice): "Probing the Obliquities of Kepler Stars"

Nov. 8: Don Lamb (Chicago): "RAISING THE GAME: FLASH Simulations of High Energy Density Physics Experiments"

Nov. 15: Rae Holcomb (Rice): "Characterizing Magnetic Fields in T Tauri Variable Stars" / Maxwell Hummel (Rice)

Nov. 22: Juna Kreka (Rice): "Soft Hair on Black Holes"

Nov. 29: Brendan Bowler (UT Austin): "Bridging the Radial Velocity and Direct Imaging Planet-Hunting Techniques: Dynamical Mass of a Brown Dwarf Companion to a Sun-Like Star"